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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/573,781	03/28/2006	Erik K. Lauritzen	2081-0147PUS1	5507
2292 7590 10/16/2008 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747				
EXAMINER				
ELDRED, JOHN W				
ART UNIT		PAPER NUMBER		
3641				
NOTIFICATION DATE		DELIVERY MODE		
10/16/2008		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

### Office Action Summary

**Application No.**

10/573,781

**Applicant(s)**

LAURITZEN, ERIK K.

**Examiner**

J. Woodrow Eldred

**Art Unit**

3641

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 6-12-08.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/55/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-6 and 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mohr et al (6,792,843) in view of the admitted prior art on page 4, lines 14-16.

Mohr et al disclose an armor assembly with a multi-ply element comprising a plate shaped ceramic (considered inherently “particle-shaped”, especially in view of the 112 rejection) inner layer 2 and two outer walls 20, 8; where the outer walls can be formed of a metal (i.e. aluminum) or fibers within an elastomeric (see column 3, lines 5-15). Mohr et al fail to disclose the particular claimed parameters of the ceramic material.

Applicant's admitted prior art indicates that the ceramic or “particle-shaped” material is commercially available. Motivation to combine is the mere substitution of known ceramics in order to perform the same basic function while providing a particular desired performance. To employ the teachings of the admitted prior art on the armor of Mohr et al and have a ceramic with the claimed parameters is considered to have been obvious to one having ordinary skill in the art.

3. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mohr et al (6,792,843) in view of the admitted prior art on page 4, lines 14-16, as applied to claims 1-6 above, and further in view of Stevens et al (2002/0152881).

Mohr et al fail to disclose that the “elastomeric” material around the fibers is rubber. Stevens et al teach, see paragraph 24, that “rubber-coated fibers” are used in armor layers. Motivation to combine is the mere substitution of a particular known elastomer for the broadly disclosed elastomeric material. To employ the teachings of Stevens et al

on the armor of Mohr et al and have fiber reinforced rubber comprise an outer wall is considered to have been obvious to one having ordinary skill in the art.

4. Applicant's arguments filed 6-12-08 have been fully considered but they are not persuasive. Applicant's main argument is that it is non-obvious or improper to combine the admitted prior art ceramic with Mohr and substitute the known ceramic for the ceramic of Mohr. Applicant states that the admitted prior art is "only available from a Danish company for use as catalytic material for the oil industry" so there is no motivation to combine elements from "totally disparate arts", and "such a substitution for the solid ceramic plates in Mohr would destroy the armour plating of Mohr for its intended function". The Examiner disagrees that it would be improper to take the known ceramic and substitute it for the ceramic of Mohr. The fact that it is perhaps marketed for a particular use in no way detracts from the fact that a person having ordinary skill in the art (i.e. either in the ceramic art or the armor art) would recognize that this is a known (and commercially available) ceramic material with particular physical properties and could be utilized for any desired use, as long as it provided desired properties and parameters. Applicant gives no reason, other than the mere declaration, that the admitted prior art ceramic would "destroy the armour plating of Mohr for its intended function." It appears clear that any ceramic could be substituted for that of Mohr and it would still provide a protection function (i.e. the intended function of the ceramic). Of course, different ceramics will provide different levels of protection (and weight, cost, density, etc.) and one of ordinary skill would be led to choose from the available ceramic materials to meet desired parameters in particular situations. In addition, it seems that Applicant's use of this material would show the exact opposite of the contention that this particular ceramic would "destroy" the intended function, but its use by Applicant tends to demonstrate that it would be effective as a protective material. (Otherwise, the current invention would be inoperative under US 112 First Paragraph.) It is also noted that Applicant argued that Mohr fails to disclose that the ceramic comprises individual ceramic particles, but it is inherent that at least the individual molecules of ceramic meet this limitation of "particles".

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. Woodrow Eldred whose telephone number is (571)272-6901. The examiner can normally be reached on Monday to Thursday, from 8:00 a.m. to 5:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone can be reached on 571-272-6873. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. Woodrow Eldred  
Primary Examiner

Art Unit: 3641

Art Unit 3641

JWE